



MOMH SERIES HYDRAULIC MOTOR

MOMH Series motors are medium speed, high torque motors designed on an internal gear design consisting of a rotor and stator. These motors are suitable for long operating periods at moderate pressures.

Characteristic Features:

- Advanced manufacturing design of the Geroler gear set, which provide high starting torque, high efficiency and long life
- Motors have high pressure shaft seals which can be used in Parallel or Series
- Smooth running over the entire speed range

Main Specifications

Type		MOMH				
		200	250	315	400	500
Geometric Displacement (cm ³ /rev.)		203.2	255.9	316.1	406.4	489.2
Max. Speed (rpm)	Cont.	366	290	236	183	155
	Int.	439	348	282	220	166
Max. Torque (Nm)	Cont.	510	621	740	850	830
	Int.	579	702	827	990	1040
	Peak	651	790	930	1092	1170
Max. Output (kW)	Cont.	16	16	14	12.5	11
	Int.	18.5	18.5	15.5	15	14
Max. Pressure Drop (Bar)	Cont.	175	175	175	155	125
	Int.	200	200	200	190	160
	Peak	225	225	225	210	180
Max. Flow (L/min)	Cont.	75	75	75	75	75
	Int.	90	90	90	90	90
Weight (kg)		10.5	11	11.5	12.3	13

Type		Max. Inlet Pressure	Max. Return Pressure with Drain Line
MOMH 200-500	Cont.	175	175
	Int.	200	200
	Peak	225	225

- Continuous Pressure: Max. value of operating motor continuously
- Intermittent Pressure: Max. value of operating motor in 6 seconds per minute
- Peak Pressure: Max. value of operating motor in 0.6 seconds per minute
- Technical data MOMH with 35mm cylindrical, 1 ¼ in splined and 35mm tapered shaft



PERFORMANCE DATA

MOMH200 [203.2cm³/rev.]

Pressure (Bar) Max.Cont. Max.Int.

35	70	105	140	175	200
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Flow (L/min)	5	98 25	194 25	284 22				
	10	101 43	204 41	301 36	391 29	482 14		
	20	99 100	201 97	304 93	402 85	509 69	576 56	
	30	97 145	197 143	300 139	402 130	510 114	579 101	
	40	90 200	190 200	292 200	399 188	507 168	578 153	
	50	82 248	183 246	284 244	392 235	500 213	571 199	
	60	73 292	174 290	274 287	384 279	493 260	563 244	
	70	63 352	163 350	264 349	374 338	481 318	554 301	
	Max. Cont.	75	59 366	157 365	259 363	366 355	475 335	547 319
		80	53 381	150 381	253 380	358 371	466 352	538 338
Max. Int.	90	39	140	241	348	456	526	
		443	437	434	426	407	392	

MOMH250 [255.9cm³/rev.]

Pressure (Bar) Max. Cont. Max.Int.

35	70	90	120	145	175	200
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Flow (L/min)	5	121 19	246 19	318 18	398 14				
	10	130 34	258 33	331 31	425 29	515 23	595 12		
	20	130 78	258 77	332 76	432 73	520 65	621 53	702 42	
	30	122 115	251 113	327 111	429 105	520 96	621 84	700 75	
	40	115 157	240 157	323 156	422 150	513 139	616 127	698 114	
	50	105 196	232 195	314 192	411 185	505 173	606 159	687 147	
	60	94 232	220 230	302 226	401 218	496 206	596 192	676 180	
	70	81.4 274	209 274	288 274	389 266	484 252	582 238	666 222	
	Max. Cont.	75	72 290	203 289	280 287	381 279	475 266	574 251	659 236
		80	66 303	194 302	273 298	371 290	467 279	566 264	651 249
Max. Int.	90	49 348	178 347	256 345	355 337	453 325	552 309	634 292	



PERFORMANCE DATA

MOMH315 [316.1cm³/rev.]

Pressure (Bar) Max.Cont Max.Int.

35	75	100	135	155	175	200
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Flow (L/min)	5	155	325					
		16	13					
	10	163	342	454	556			
		27	24	18	14			
	20	169	349	469	582	664	733	809
		63	61	55	48	40	32	19
	30	165	344	470	580	669	740	824
		93	89	82	77	67	59	46
	40	154	337	465	577	663	737	827
		126	126	119	111	99	88	73
Max. Cont.	50	141	325	455	568	656	728	824
		159	155	148	139	126	115	98
	60	121	312	440	555	643	715	812
		187	186	179	169	154	143	124
	70	103	298	425	541	631	703	800
		222	222	215	205	187	176	157
	75	94	287	417	529	623	696	792
		236	233	224	215	196	184	166
	80	82	277	406	518	611	688	784
		246	244	236	228	210	197	174
Max. Int.	90	62	256	386	496	593	669	767
		282	280	275	266	248	234	209

MOMH400 [406.4cm³/rev.]

Pressure (Bar) Max. Cont. Max.Int.

35	60	105	125	155	190
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Flow (L/min)	5	196	348	516				
		13	13	10				
	10	205	363	546	702	859		
		22	21	21	17	11		
	20	209	366	543	708	874	988	
		50	49	46	41	36	31	
	30	201	357	542	706	864	984	
		73	72	70	63	56	51	
	40	195	346	532	701	858	973	
		99	98	96	86	77	71	
Max. Cont.	50	173	332	518	687	848	958	
		123	122	118	107	97	90	
	60	154	319	501	688	833	944	
		146	144	141	128	115	106	
	70	138	305	480	649	814	925	
		174	173	169	156	141	130	
	75	128	294	466	637	802	911	
		183	181	177	163	149	138	
	80	113	277	451	621	786	899	
		192	191	188	174	158	144	
Max. Int.	90	90	256	433	595	767	881	
		220	220	215	202	183	165	

Cont
Int.

Torque (Nm) 593
Speed (rpm) 248



PERFORMANCE DATA

MOMH500 [500cm³/rev.]

Pressure (Bar) Max.Cont Max.Int.

25	50	85	100	125	160
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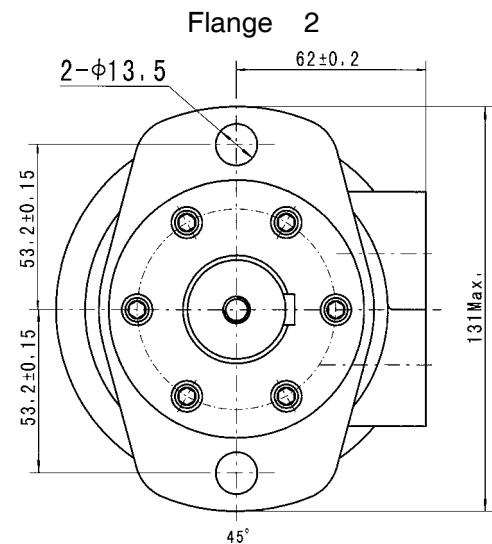
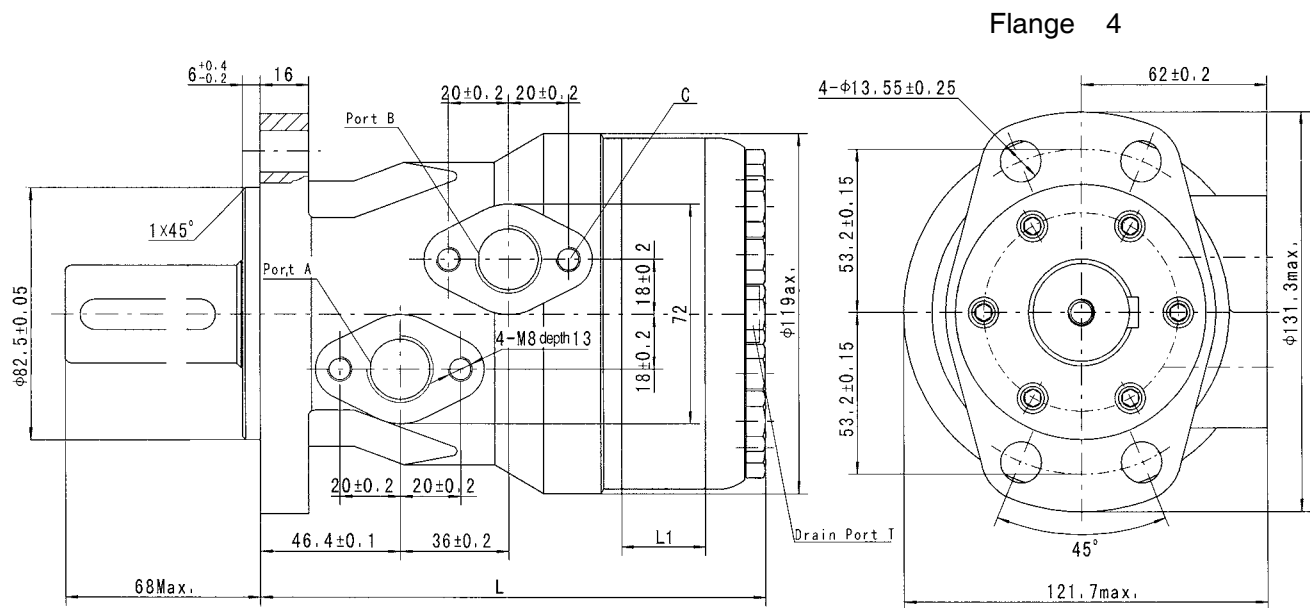
Flow (L/min)	5	165 11	317 11	516 8				
	10	178 20	335 19	555 17	669 15	791 13	969 9	
	20	177 42	331 42	559 41	673 38	799 36	988 29	
	30	172 64	320 63	553 61	663 57	792 53	983 47	
	40	163 85	309 85	541 83	654 79	783 75	971 67	
	50	146 103	296 103	523 103	635 97	768 93	954 85	
	60	121 124	275 124	502 123	614 117	747 113	934 103	
	70	97 148	256 148	482 148	597 140	729 134	917 122	
	Max. Cont.	75	79	240	469	582	714	902
			155	155	155	152	144	130
Max. Int.	80	60	226	453	570	701	884	
		166	166	166	159	153	139	
	90	34 166	201 165	421 164	550 157	673 156	869 155	

Cont
Int.

Torque (Nm) 673
Speed (rpm) 156



MOMH DIMENSIONS AND MOUNTING DATA

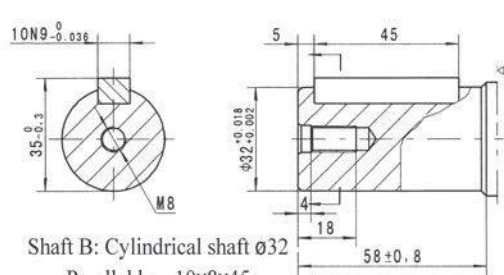


Model	L	L1
MOMH-200	168	27
MOMH-250	175	34
MOMH-315	184	42
MOMH-400	195	54
MOMH-500	206	65

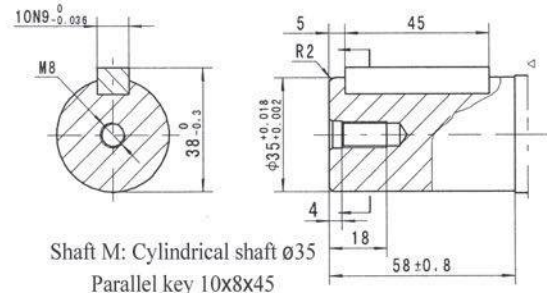
Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (15)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-M8 (13)	4-M8 (13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 1/4



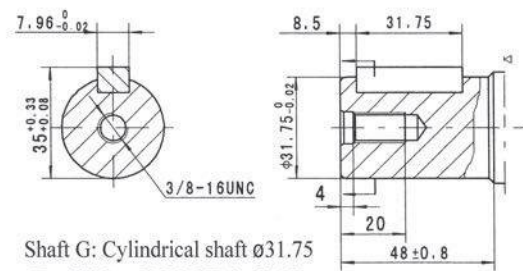
MOMH SHAFT EXTENSIONS DIMENSIONS DATA



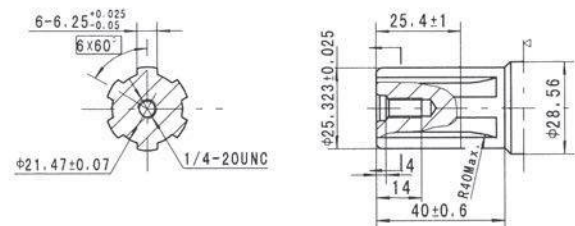
Shaft B: Cylindrical shaft Ø32
Parallel key 10x8x45



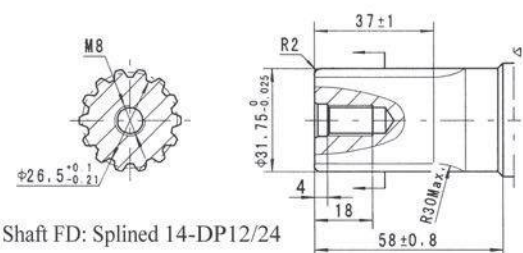
Shaft M: Cylindrical shaft Ø35
Parallel key 10x8x45



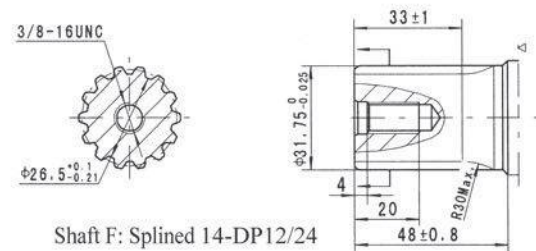
Shaft G: Cylindrical shaft Ø31.75
Parallel key 7.96x7.96x31.75



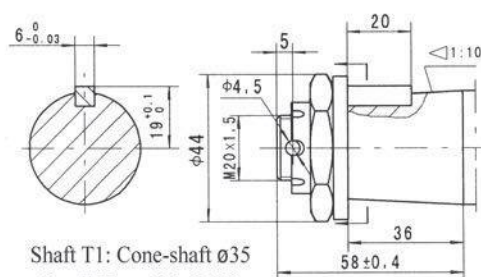
Shaft S: Splined SAE 6B



Shaft FD: Splined 14-DP12/24



Shaft F: Splined 14-DP12/24



Shaft T1: Cone-shaft Ø35
Parallel key B6x6x20
Tightening torque: 200 ± 10Nxm

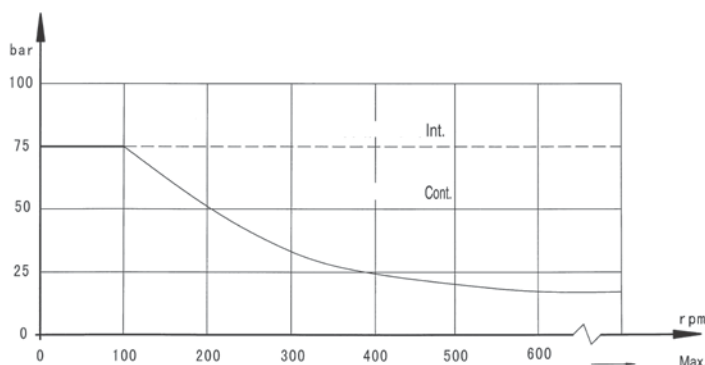
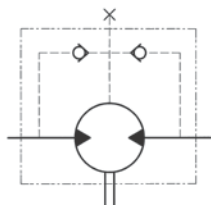


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PERMISSIBLE SHAFT SEAL PRESSURE

In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line.

When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

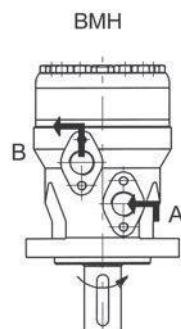


DIRECTION OF SHAFT ROTATION: STANDARD

When facing shaft end of motor, shaft to rotate:

Clockwise when Port "A" is pressurised

Counter-clockwise Port "B" is pressurised

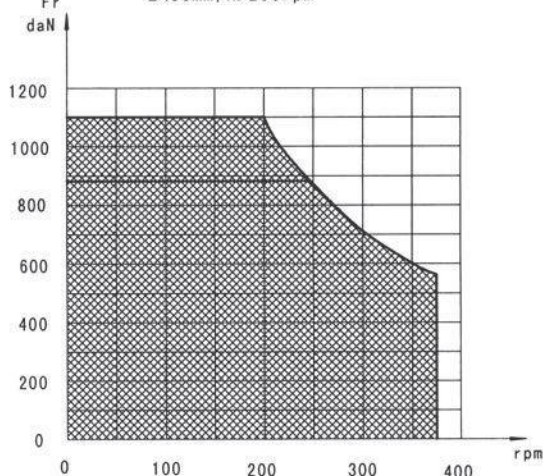


STATUS OF THE SHAFT'S RADIAL FORCE

Status of the shaft's radial force

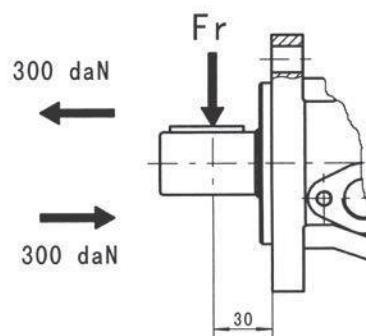
$$F_r = \frac{1100}{n} \times \frac{25000}{103.5+L} \text{ daN}$$

$L < 60\text{mm}, n > 200\text{rpm}$



— shaft $\phi 1"$ ($\phi 25.4\text{mm}$) and shaft SAE 6B

The drawing is the Possible load when $L=30\text{mm}$.



F_r =Radial Force (daN)

L =Distance (mm)

n =Speed (rpm)



ORDER INFORMATION

1	2		3		4		5		6		7		8
Code	Disp.		Flange		Output Shaft		Port & Drain Port		Rotation Direction		Paint		Unusual Function
MOMH	160		2-Ø13.5 Rhomb-Flange, Pilot Ø82.5x8 4-Ø13.5 Rhomb-Flange, Pilot Ø82.5x8	B	Shaft Ø32, Parallel Key 10x8x45	D	G1/2 Manifold Mount 4xM8, G1/4						
	200			M	Shaft Ø35, Parallel Key 10x8x45	M	M22x1.5 Manifold Mount 4xM8, M14x1.5						
	250			F	Shaft Ø31.75, Splined Key 14-DP12/24								
	315			FD	Long Shaft Ø31.75, Splined Key 14-DP12/24								
	400	2		G	Shaft Ø32, Parallel Key 7.96x7.96x31.75	S	7/8-14 O-Ring Manifold Mount 4xM8, 7/16-20UNF	Omit R	Standard Opposite	00 Omit B S	No Paint Blue Black Silver Grey	Omit O F LS	Standard No Drain Free Running Low Speed
	500	4		T1	Cone Shaft Ø35, Parallel Key B6x6x20								
				S	Shaft Ø25.4, Parallel Key SAE 6B	P	1/2-14 NPFT Manifold Mount 4xM8, 7/16-20UNF						
						R	PT(Rc)1/2 Manifold Mount 4-M8, PT(Rc)1/4						